### **Marine Life Protection Act Initiative**



# Habitat Representation Evaluation Methods for the North Coast Study Region

Presented to the MLPA Master Plan Science Advisory Team February 11, 2011 • Webinar and Teleconference

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### **Habitat Protection Guidelines**

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Every "key" marine habitat should be represented in the MPA network to protect the diversity of species that live in different habitats and those that move among different habitats over their lifetime.

"Key" marine habitats should be replicated in multiple MPAs across large environmental and geographic gradients to protect the greater diversity of species and communities that occur across such gradients, and to protect species from local year-to-year fluctuations in larval production and recruitment.

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At least three to five replicate MPAs should be designed for each habitat type within a <u>biogeographical region</u> to provide analytical power for management comparisons and to buffer against catastrophic loss of an MPA.

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## **Key Habitats in the North Coast**

#### **Shoreline**

- rocky shores
- · sandy beaches
- surfgrass\*

### Rocky reef

- rocky reef 0-30m\*
- rocky reef 30-100m
- rocky reef 100-200m<sup>†</sup>
- rocky reef >200m<sup>†</sup>
- kelp forests\*
- pinnacles\*

#### **Estuarine**

- coastal marsh
- tidal flats\*
- · estuarine waters
- eelgrass\*

#### Soft bottom

- soft bottom 0-30m\*
- soft bottom 30-100m
- soft bottom 100-200m<sup>†</sup>
- soft bottom >200m<sup>†</sup>
- submarine canyons\*†

#### **Pelagic habitats**

- upwelling centers\*
- retention zones\*
- \* indicates mapping limitations
- river plumes\*
- oceanographic fronts\*

† indicates rare habitats



m = meter

# **Unique Habitats in the North Coast**

- Potential unique habitats considered at previous meetings:
  - Offshore rocks and sea stacks
  - Dynamic river mouths
  - Drowned river canyons or "sunken" rivers
- SAT Habitat Work Group suggests these habitats fall under the umbrella of "key" habitats

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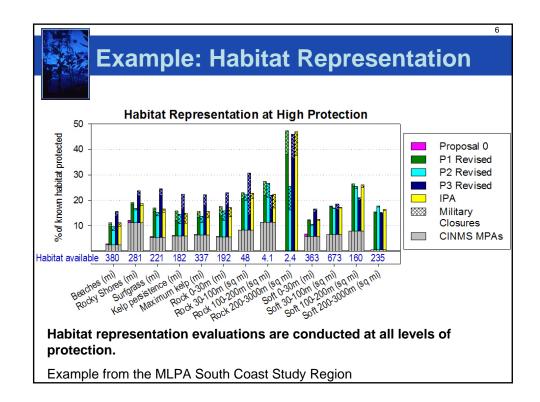


### **Habitat Representation Evaluation Methods**



#### Consider the availability of habitats

- within the entire study region
- within each of the bioregions
- Calculate the <u>percent</u> of each habitat protected at each level of protection (regardless of MPA size)
  - within the entire study region
  - within each of the bioregions
- Note where habitat protection is not distributed across both bioregions



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# **Summary**

### **Approval sought for:**

- List of key habitats for the MLPA North Coast Study Region
- Habitat representation evaluation methods to be inserted into the Methods Used to Evaluate MPA Proposals in the North Coast Study Region as Chapter 4
- Evaluation of habitat representation will be applied to round 1 – evaluation of external MPA arrays – and subsequent rounds of evaluation of MPA proposals